

CALCULATION AGENT SERVICES FOR LONGEVITY RISK TRANSFER TRANSACTIONS



INTRODUCTION

Improvements in human longevity are a source of risk and uncertainty for pension scheme trustees. Over the last decade, a number of structures for managing longevity risk in pension schemes have emerged. A key option for some schemes is the longevity swap.

LONGEVITY SWAPS

In a longevity swap, the pension scheme enters into an agreement to transfer its longevity risk using a swap with fixed and floating legs. The pension scheme exchanges a commitment to make future fixed payments (based on estimated future pension payments) in return for another party making a commitment to meet the uncertain actual future payments. The pension scheme then has the security of known future payments. The pension scheme usually has to pay an additional premium as a contribution towards the costs and risks incurred by the party committed to meeting the actual future payments.

The transaction only covers the difference between the actual and projected pension payments. Therefore, the investment risk remains primarily with the pension scheme.

STRUCTURE OF THE SWAP

Longevity transactions generally depend on access to the large capacity for longevity risk in the global reinsurance market. As reinsurance companies cannot transact directly with pension schemes such arrangements may depend on an intermediary such as a fronting insurer. A more effective solution in some cases has been for the trustees to establish a captive insurance company which can be less expensive than the cost of fronting fees.

OPERATION OF THE SWAP

The operation of the swap depends on monitoring the actual cash flows and comparing these with the agreed fixed payments. Both parties will be concerned that if actual and projected experience changes then the future amount due could be material.

To address this concern the pension scheme and the insurance company are each required to post collateral depending on past experience and the projected net cash flow. The collateral is then held by a custodian.

Accordingly, a calculation agent is required who will revalue the fixed and floating legs of the swap at an agreed frequency for the lifetime of the transaction. This gives the net expected value of the transaction and hence the amount of collateral that needs to be posted by one of the parties.

ACTUARIAL SUPPORT

The role of calculation agent is usually undertaken by an actuarial firm given their expertise and experience in projections involving future pensions. The actuarial specialist appointed would generally be independent from the parties to the longevity transaction.

We have a number of actuaries with relevant expertise and experience to provide actuarial support to pension scheme trustees who are considering entering into a longevity transaction.

EXPERIENCE

We have experience with calculation agent work for a number of longevity transactions in Guernsey, including:

- Valuation of fixed and floating legs of a transaction
- Dealing with data adjustments as they emerge
- Determination of collateral requirements

GUERNSEY LOCATION

We are based in Guernsey which has emerged as the predominant location for longevity swaps placed through captives. It is important that the captive demonstrates its substance in Guernsey to avoid potential tax risks that can arise when dealing with UK pension schemes. We believe that our location provides a way for captives to minimise this risk.

continued/...

OTHER ACTUARIAL SERVICES

We provide a full range of actuarial services including strategic advice on investment strategy and asset-liability management, and reinsurance structures.

FURTHER INFORMATION

Established in 1979 the BWCI Group is the largest group of actuaries and consultants in the Channel Islands with over 130 staff encompassing a wide range of disciplines.

The BWCI Group is a member of Abelica Global, the international network of leading independent actuarial firms.

For further information on these and other insurance services provided by the BWCI Group, please contact insurance@bwcigroup.com or visit our website at www.bwcigroup.com.



Focused

because we are focused on our clients' needs and provide a service to suit their individual requirements.

Practical

because we deliver solutions in practical, commercial and cost-effective ways.

Innovative

because we seek innovative solutions to complex financial problems using advanced analytical tools and software.

Guernsey office | PO Box 68, Albert House
South Esplanade, St Peter Port
Guernsey, GY1 3BY
Tel | +44 (0)1481 728432
Fax | +44 (0)1481 724082
Web | www.bwcigroup.com

Jersey office | Kingsgate House,
55 Esplanade, St Helier
Jersey, JE2 3QB
Tel | +44 (0)1534 880112
Fax | +44 (0)1534 880113
Web | www.bwcigroup.com